CAPTURING THE MULTIPLE BENEFITS OF ENERGY EFFICIENCY

Roundtable on Macroeconomic Impacts
24th & 25th January 2013, Paris, France

DAY 1 - JANUARY 24, 2013

WELCOME	
1:00 pm	**Registration and coffee**
1:45 pm	**Welcome** by Didier Houssin, Director, Sustainable Energy Policy and Technology, IEA

TIME	**TOPIC**	**PRESENTERS**
Session 1. Plenary Session; Modelling energy efficiency's macroeconomic benefits – recent results. ***This session will present results of recent flagship studies focused on the benefits of energy efficiency for jobs and the economy.*** *Moderator: Philippe Benoit, Head of Energy Efficiency and Environment Division, IEA*		
2:00-3:30 pm	Macroeconomic benefits of the *Efficient World* Scenario (IEA WEO 2012)	Jean Chateau OECD Environment Directorate, Climate Change, Biodiversity and Development Division
	Modelling the macroeconomic benefits of the Energy Efficiency Directorate	Unnada Chewpreecha, Cambridge Econometrics
	Multiple benefits of investing in energy efficient renovation of buildings	Sigurd Naess-Schmidt, Copenhagen Economics
	Macroeconomic impacts of energy efficiency policies in the UK	Terry Barker, Cambridge Centre for Climate Change Research, University of Cambridge
	Economy-wide impacts of energy efficiency in Germany	Ulrike Lehr and Christian Lutz, GWS mbH
3:30-3:45 pm	Clarifying questions	
3:45-4:00pm	COFFEE BREAK	

<u>Session 2. Discussion Session: Challenges and development needs for estimating macroeconomic benefits.</u> ***This session will focus on key issues that must be addressed when using economic models (in particular CGE) to estimate the economic benefits of energy efficiency.*** *Moderator: Dr. Harry Saunders, Decision Processes Incorporated(invited)*		
4:30-6:00 pm	**Issues:** • Scope of macroeconomic benefits estimation: GDP growth, trade balance, public budget, fiscal returns, infrastructure investment, industrial productivity, employment? • Troublesome issues: direct vs. indirect effects, keeping track of transfers and rents, geographic scope • Choosing metrics – GDP or GNI, welfare, timeframe? • Maintaining policy coherence of results • Incorporating bilateral trade flows and capital mobility • Locating appropriate data	**Discussants:** • Bertrand Magne, OECD • Hector Politt, Cambridge Econometrics • Martin Bo Hansen, Copenhagen Economics • Terry Barker, CCCCR • Ulrike Lehr/ Christian Lutz, GWS mbH • Uwe Remme, EPT Modelling Team, IEA • Ingrid Holmes, E3G
6:00 pm	HOSTED RECEPTION	

DAY 2 - JANUARY 25, 2013

TIME	TOPIC	PRESENTERS
<u>Session 3. Plenary Session; Sectoral issues and approaches.</u> ***This session will present and contrast how modelling approaches vary according to end-use sector and the modelling issues which must be addressed on a sectoral basis.*** *Moderator: Rob Dellink, OECD Environment Division*		
9:00-10:30am	Impact of the German Government's Building Rehabilitation Program on Public Budgets	Wilhelm Kuckshinrichs, Institute for Energy and Climate Research, Research Centre Jülich,
	Estimating the jobs and macroeconomic benefits of a national building renovation programme in Hungary	Diana Urge-Vorsatz, PhD Director & Professor, Center for Climate Change and Sustainable Energy Policy (3CSEP)
	Macroeconomic benefits of transport efficiency improvements	David Roland-Holst, Adjunct Professor Department of Agricultural and Resource Economics, UC Berkeley
	Utilization of the Three-ME (Multi-sector Macroeconomic Model for the Evaluation of Environmental and Energy policy) to model the macroeconomic benefits of Grenelle II	Frédérick Reynes, Observertoire Francais des Conjonctures Economiques and Dr. Gaël Callonnec ADEME, France
	Estimating the macroeconomic benefits of energy efficiency for the industrial sector	Skip Laitner, American Council for an Energy Efficient Economy
10:30-45	Clarifying questions	

10:45-11am	COFFEE BREAK

Session 4. Discussion Session: Pros and cons of sectoral vs. economy-wide modelling approaches. ***This session will consider the advantages and shortfalls of sectoral and global approaches to estimating energy efficiency's macroeconomic benefits.***
Moderator: Dorothy Maxwell, Global View Sustainability Services (GVSS) Ltd (invited)

11:30-12:30	**Issues:** • Accounting for sectoral shifts • Accounting for capital mobility and crowding-out • Top down vs bottom up modelling methods • Comparison between sum of sectoral effects and macroeconomic estimation • Avoiding double-counting • How and when to factor in rebound effects • Use of multipliers to estimate employment, indirect effects etc.	**Discussants:** • Willhelm Kuckshinrichs, Research Centre Julich • Dianna Urge-Vorsatz, CUP • David Roland-Holst, UC Berkeley • Frédérick Reynes, OFCE • Skip Laitner, ACEEE • Marcus Wrake, IEA • Julia Reinaud, Institute For Industrial Productivity • Harry Saunders, Decision Processes Incorporated
12:30-2:00 pm	HOSTED LUNCH	

Session 5. Plenary Session: Utilising macroeconomic modelling to evaluate energy efficiency policies and programmes. ***This session will present practical results from the evaluation community regarding how to harness econometric modelling in the context of policy and programme evaluations for governments and regulators focus.***
Moderator: Ingrid Holmes, E3G

2:30-3:30pm	Incorporating economic modeling results into energy efficiency ex ante evaluations	Mikael Skou Andersen, European Environment Agency
	Options for accounting and modelling energy-economy interactions	Karen Turner, University of Stirling, UK
	Economic Analysis of Residential and Small-Business Energy Efficiency Improvements	Jim Scheer, Sustainable Energy Authority Ireland
	Canada's Integrated Energy & Macroeconomic modeling of energy efficiency gains over time	John Appleby, Office of Energy Efficiency, Natural Resources Canada
	Estimating the macroeconomic benefits of the Green Deal in conformance with the UK Green Book framework	Sam Thomas, UK Department of Energy and Climate Change
3:30-3:45pm	Clarifying questions	
3:45-4:00pm	COFFEE BREAK	

<u>Session 6. Discussion Session: Bringing it all together.</u> ***This session will focus on what the IEA should take from this workshop in terms of this work stream's outputs - a Tool Kit on Econometric Modelling for energy efficiency evaluators and a Handbook on Evaluating Multiple Benefits for Policymakers.*** *Moderator: Lisa Ryan, IEA*		
4:00-5:30pm	Issues: • What elements should be included as macroeconomic impacts in policy appraisal? • What methodologies can be developed for policy makers? • What data is desirable/ what data is available? • Measuring macroeconomic rebound effects • What default input values are available? Which should be used? • Which circumstances have the most effect in terms of changing outcomes?	**Discussants:** • Mikael Skou Andersen, European Environment Agency • Karen Turner, University of Stirling • Jim Scheer, SEAI • John Appleby, Office of Energy Efficiency, Natural Resources Canada • Sam Thomas, UK DECC • Pedro Guertler, UK ACE • Paul Hodson, DG-Energy • Laura Segafredo, Climate Works
5.30pm	**CLOSE OF WORKSHOP**	